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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/690,876

10/22/2003

Robert Leon Benedict

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08/24/2005

THE GOODYEAR TIRE & RUBBER COMPANY
INTELLECTUAL PROPERTY DEPARTMENT 823
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EXAMINER

FUREMAN, JARED

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,876

Applicant(s)

BENEDICT, ROBERT LEON

Examiner

Jared J. Fureman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Receipt is acknowledged of the IDS, on 2/4/2005, and the amendment and affidavit, on 5/25/2005, all of which have been entered in the file. Claims 1-18 are pending.

Claim Objections

1. Claim 3 is objected to because of the following informalities: Claim 3, line 2: "f, and g" should be replaced with --and f--, since there is no step g recited in claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 6-9, 11-15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juzswik et al (US 6,612,165 B2, cited by applicant) in view of Hardman et al (US 2002/0126005 A1) and Harm et al (US 2004/0084517 A1).

Juzswik et al teaches a method for integrating tire identification data and vehicular identification data, comprising the steps: manufacturing tire tag means (tire based unit 18) having data retention tag memory (memory 30); writing tag means identification data into tag memory (since the memory 30 includes an identification code for identifying tire based unit 18, see column 3 lines 42-47, the step of writing tag means identification data into the tag memory is necessarily present); transferring the tire to an

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original equipment manufacturer (the vehicle manufacturer, for example); associating the tire (tire 14) with a specific vehicle (the tires 14 are associated with a specific vehicle 12 by being mounted on that vehicle); manufacturing the tag means to include a transponder (controller 26) and antenna (antennas 32, 34) assembly; manufacturing the antenna in an annular form (see figure 1) coupled to the transponder; the tire tag having at least a pressure sensor (22); validating the tag identification data in a vehicle electronic control unit (controller 36) against the tag identification data of tires used by the vehicle throughout the lifecycle of the vehicle (the received tag data is compared to tag data stored in memory 42 of controller 36; see column 4, lines 11-18) (see figure 1, column 3 lines 1 - column 4 line 18, column 5 lines 15-27).

Juzswik et al fails to state how the tire based unit 18 is mounted, and thus, fails to specifically teach the step of affixing the tag means to a tire. Juzswik et al also fails to teach calibrating tag functions; and including tag functions calibration data into the tag means identification data; writing a vehicle identification code identifying the specific vehicle into the tag memory.

Hardman et al teaches a method, including the steps of affixing (attaching to the interior of a tire, for example) a tire tag means (tire tag 14) to a tire (tire 10); calibrating tag functions, and including tag functions calibration data (calibration coefficients) into the tag means identification data (since the reader 30 may request the tag to transmit calibration coefficients, see paragraph 120, the steps of calibrating the tag and storing calibration data are necessarily present); writing a vehicle identification code identifying the specific vehicle into the tag memory (since a vehicle ID may be read from the tag,

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see paragraph 120, the step of writing a vehicle identification code into the tag memory is necessarily present (also see figure 1a and paragraphs 55-57).

In view of Hardman et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the method as taught by Juzswik et al, the step of affixing the tag means to a tire; calibrating tag functions; and including tag functions calibration data into the tag means identification data; writing a vehicle identification code identifying the specific vehicle into the tag memory; in order to securely attach the tag to the tire, thereby helping to prevent damage of the tag from weather and vandalism, and also prevent the tag from becoming disassociated from the tire being monitored (see paragraphs 6 and 55, of Hardman et al) and provide the tire monitoring system all relevant and necessary information regarding the tire tag.

Juzswik et al as modified by Hardman et al also fails to teach the step of writing tire identification data identifying the tire into the tag memory; initializing a vehicle system; reading the tire identification data from the tag memory into a vehicle data retention memory; connecting the tire data storage means to the vehicle electronic control unit by means of a vehicle data bus.

Harm et al teaches a method including the step (see paragraph 15) of writing tire (tire 30) identification data identifying the tire into a tag memory (a memory of tire pressure monitoring sensor 10, for example); initializing a vehicle system (the vehicle central processor unit, see paragraph 15); reading (see paragraph 15) the tire identification data from the tag memory into a vehicle data retention memory (the memory of a vehicle controller, for example); connecting the tire data storage means to

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the vehicle electronic control unit by means of a vehicle data bus (since the tire information may be read into the vehicle controller, a tire data storage means connected to the vehicle controller by means of a data bus is necessarily present) (also see paragraphs 3, 4 and 15).

In view of Harm et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the method as taught by Juzswik et al as modified by Hardman et al, the steps of writing tire identification data identifying the tire into the tag memory; initializing a vehicle system; reading the tire identification data from the tag memory into a vehicle data retention memory; connecting the tire data storage means to the vehicle electronic control unit by means of a vehicle data bus; in order to allow identification and tracking of the particular tire associated with the tire tag, for future recall or other data tracking requirements (see paragraph 15, of Harm et al).

4. Claims 2, 3, 5, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juzswik et al as modified by Hardman et al and Harm et al in view of the admitted prior art.

The teachings of Juzswik et al as modified by Hardman et al and Harm et al have been discussed above.

Re claims 2, 3, 16 and 17: Juzswik et al as modified by Hardman et al and Harm et al fails to specifically teach the steps of uploading/reading the tire identification data from the vehicle data retention memory to an archive database; wherein steps a and b are conducted by a tire tag means supplier; steps c and d are conducted by a tire

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supplier; and steps d, e, f and g are conducted by a vehicle manufacturer; uploading data from the vehicle data retention memory to an archive database; running a diagnostic test on the vehicle substantially at the conclusion of vehicle assembly; and reading the tire identification data from the tire data storage means into the ECU data storage means substantially contemporaneous with the running of the diagnostic test.

However, the admitted prior art teaches uploading data from a vehicle control unit upon conducting a diagnostic test of the vehicle systems (see paragraph 6, of the specification, under background of the invention); the identity of the transponder and tag being designated by the manufacturer of the transponder and tag, the tire manufacturer designating tire identification data, and the vehicle manufacturer associating the tire with a specific vehicle and reading tire identification data; uploading data from the vehicle data retention memory to an archive database; running a diagnostic test on the vehicle substantially at the conclusion of vehicle assembly; and reading the tire identification data from the tire data storage means into the ECU data storage means substantially contemporaneous with the running of the diagnostic test (see paragraph 7, of the specification, under background of the invention).

In view of the admitted prior art teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the method as taught by Juzswik et al as modified by Hardman et al and Harm et al, the steps of uploading/reading the tire identification data from the vehicle data retention memory to an archive database; wherein steps a and b are conducted by a tire tag means supplier; steps c and d are conducted by a tire supplier; and steps d, e, f and g are conducted by

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a vehicle manufacturer; uploading data from the vehicle data retention memory to an archive database; running a diagnostic test on the vehicle substantially at the conclusion of vehicle assembly; and reading the tire identification data from the tire data storage means into the ECU data storage means substantially contemporaneous with the running of the diagnostic test; in order to provide identification of each of the components during each step of the method, thereby maintaining accurate data recording.

Re claim 5: Juzswik et al as modified by Hardman et al, Harm et al and the admitted prior art fails to specifically teach rewriting a vehicle identification code from the vehicle.

However, Hardman et al also teaches erasing user data (see paragraph 105), thereby, allowing rewriting of data, including a vehicle identification code.

In view of Hardman et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the method as taught by Juzswik et al as modified by Hardman et al, Harm et al and the admitted prior art, rewriting a vehicle identification code from the vehicle; in order to allow the tire to be used with a different vehicle, or sold to a different owner (see paragraph 105, of Hardman et al).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juzswik et al as modified by Hardman et al and Harm et al in view of Meadows (US 6,149,060).

The teachings of Juzswik et al as modified by Hardman et al and Harm et al have been discussed above.

Juzswik et al as modified by Hardman et al and Harm et al fails to specifically teach writing an OEM part number into the tag memory prior to transferring the tire to an OEM.

Meadows teaches that a tire (10) may include information identifying a part number (see column 3, lines 16-17), which would be provided prior to transferring the tire to a vehicle manufacturer.

In view of Meadows teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the method as taught by Juzswik et al as modified by Hardman et al and Harm et al, writing an OEM part number into the tag memory prior to transferring the tire to an OEM; in order to provide a machine readable part number, thereby making identification of the tire efficient and accurate.

Response to Arguments

6. Applicant's arguments filed 5/25/2005 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually (Juzswik fails to teach writing tire ID data into tag memory, inclusion of vehicle ID data in the tag memory, etc. (see pages 7-8 of the amendment filed on 5/25/2005); Hardman in conjunction with Juzswik fails to teach writing tire ID data from the tag memory to a vehicle database (see page 8 of the amendment filed on 5/25/2005); Harm fails to teach uploading relevant information at the running of system diagnostics at the conclusion of vehicle manufacture (see page 9 of the amendment filed on 5/25/2005), one cannot show nonobviousness by attacking references individually where the rejections are

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based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Furthermore, it is noted that claim 1 does not require the uploading of information from the vehicle at the running of system diagnostics at the conclusion of vehicle manufacture.

In response to applicant's argument that the sequence of the claimed methodology is intended to comprise an efficient and productive means by which tag, tire, and vehicle information are gathered, stored, and communicated between the tire, the vehicle, and an archive database; the sequence of steps and the coordination of such communication at a stage when the vehicle diagnostics is run is not found in the references (see page 8 of the amendment filed on 5/25/2005), applicant's background of the invention teaches that the order of some of the method steps is already known and practiced; likewise the division by party of the steps performed is already known and practiced (see, for example, paragraphs 5-7 of the specification). Furthermore, Harm teaches writing tire identification data to the tire pressure monitoring sensor 10 after the sensor is associated with a tire (see paragraph 15, of Harm) and downloading information from the sensor to the vehicle controller after the tire is mounted to a vehicle (see paragraph 15, of Harm). Harm also teaches the vehicle manufacturer storing the tire and vehicle information for future recall or other data tracking requirements (see paragraph 15, of Harm). Thus, when combining the teachings of the admitted prior art (for example, uploading data from the vehicle control unit after the vehicle control unit conducts a system test at the end of assembly, see paragraph 6 of the specification)

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with Harm, one ordinary skill in the art at the time of the invention would naturally include the tire sensor information, tire identification information and vehicle information with the data that is uploaded after the system diagnostic test, since Harm teaches storing this information in the vehicle central processor control unit. Thus, it is believed that the combined teachings of the references, as well as the knowledge generally available to those of ordinary skill in the art at the time of the invention (for example, the teachings discussed in applicant's background of the invention) suggest, to one of ordinary skill in the art at the time of the invention, applicant's claimed method.

In response to applicant's argument that Harm is not prior art in view of applicant's affidavit under 37 C.F.R. 1.131 (see page 9 of the amendment filed on 5/25/2005), The affidavit filed on 5/25/2005 under 37 CFR 1.131 has been considered but is ineffective to overcome the Harm reference. Part (b) of 37 C.F.R. 1.131 requires that the showing of facts must establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application. While applicant's affidavit may show conception prior to the effective date of the Harm reference, it is believed that the showing of facts does not establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application. Applicants have not provided any original exhibits or

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records showing reduction to practice or due diligence between the invention disclosure dated October 9, 2001 and the October 22, 2003 filing date of the present application.

In response to applicant's argument that Meadows identifies a tire through creating a bar code, which is totally unrelated to incorporating part information into a tire tag (see page 10 of the amendment filed on 5/25/2005), while Meadows teaches the use of a bar code to identify a part number of the tire, what is relevant to one of ordinary skill in the art at the time of the invention is that Meadows teaches providing a part number of the tire, with the tire, prior to transferring the tire to a manufacturer of the vehicle. As the prior art of record shows, both bar codes and electronic tire tags were well known to those of ordinary skill in the art at the time of the invention. When combining Meadows teaching of providing the tire with a part number, with the tire tags as taught by the Juzswik, Meadows and Harm, one of ordinary skill in the art at the time of the invention would have been motivated to store the part number in the tire tag in order to provide allow non-visual reading of the part number. Providing the tire part number in the tire tag would provide a more reliable means of reading the part number than a bar code, for example, in the event the tire is covered with mud or snow the bar code may be unreadable.

For these reasons, the examiner believes that the prior art of record teaches/suggests the claimed invention to one of ordinary skill in the art at the time of the invention.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hardman et al (US 6,885,296), Strege et al (US 6,917,417), McClelland et al (US 6,906,624), Stewart et al (US 6,882,270) and Marguet et al (US 6,864,785) all teach tire pressure monitoring and identification systems.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (571) 272-2391. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jared J. Fureman
Jared J. Fureman
Primary Examiner
Art Unit 2876

August 21, 2005